OBJECTIVES: To evaluate the cost-effectiveness of CYP2C9 genotyping for the management of anticoagulation therapy in patients newly started on warfarin from the provider's perspective. **METHODS:** A decision tree was designed to simulate, over 12 months, the outcomes of patients newly started on warfarin associated with two alternatives: 1) no genotyping (standard care group); and 2) CYP2C9 genotyping prior to initiation of warfarin therapy (genotyping group). Each alternative could lead to three possible outcomes: No event, bleeding, and thromboembolic event (TE). Patients in the standard care group would receive standard care of the anticoagulation clinic (AC). In the genotyping group, intensified anticoagulation service would be provided to patients with at least one variant CYP2C9 allele while others would receive standard AC care. The intensified AC service was assumed to reduce all event rates by 50% and cost more than standard service by 50%. The prevalence of CYP2C9 polymorphism and event rates was derived from literature. Cost of standard AC service and management of events were estimated from the literature and the Diagnosis-Related Groups charges. Sensitivity analysis was conducted to examine the robustness of the model. **RESULTS:** The cost per patient-year and event-free rate per 100 patient-year of the genotyping group and the standard care group were USD 1729 and 89%, and, USD 2068 and 85%, respectively. One-way sensitivity analysis showed that the model was sensitive to variation of two variables: rate of bleeding in patients with at least one variant CYP2C9 allele (threshold value = 0.04 events per 100 patient-year) and the reduction of bleeding rate in patients with at least one variant CYP2C9 allele with the intensified service (threshold value = 10%). **CONCLUSION:** The genotyping group was less expensive and more effective than the standard care group for the management of anticoagulation therapy in patients newly started on warfarin.

PCV70

A PHARMACOECONOMIC COMPARISON OF UNFRACTIONATED HEPARIN AND LOW MOLECULAR WEIGHT HEPARIN USAGE IN ACUTE CORONARY SYNDROME IN RUSSIA

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OBJECTIVE: To conduct an economic evaluation of unfractionated heparin (UFH) compared with low molecular weight heparin (LMWH) enoxaparin in acute coronary syndrome (ACS) treatment. **METHODS:** Two group patients with ACS. Arm A: 23 patients with unstable angina (UA)—52.2% and non-Q-wave myocardial infarction (NQWMI)—37.8% treated by UFH, 200 IU/kg/day. Arm B:—23 patients, 52.2% in UA and 37.8% in NQWMI treated by enoxaparin 1 mg/kg/twice a day. All patients were treated by heparin up to remission achievement. Economic evaluation was done by cost—effectiveness analysis usage. The costs of the treatment and resource utilization items were analyzed. Unit costs were based on detailed data from the Moscow Obligatory Insurance Fond (January 2003). The total direct medical costs were calculated as a sum of costs for follows: expenses on medicine and drug using, hospital expenditures, diagnostic and laboratory tests, time allocation. Achievement of stable remission of the process was the effectiveness. **RESULTS:** The total direct medical costs of Arm A came to 538,960 rubles and expenditures for heparin usage were 10,000 rubles (1.8%) of them. And for Arm B it was 457,072 rubles as total medical costs and 53,146 rubles or 11.6% of them for enoxaparin usage. Stable remission was 65% and 83% for Arms A and B respectively. Serious side effects weren't registered at all. Cost effectiveness (CE) index for both groups was calculated as CE = The total costs of whole treatment/Effectiveness (% of remission) CE A = 360.5 rubles/% per patient. CE B = 239.43 rubles/% per patient. The Rate of Exchange was 31.5 rubles for USD$1. **CONCLUSION:** in spite of the high costs for LMWH in compare to UFH this is evidence based way for approaching necessary effect of patients in ACS with investment saving.

PCV71

AN ECONOMIC EVALUATION OF TREATMENTS FOR ACUTE MI IN GREECE IN ELDERLY AND LATE TREATMENT PATIENTS

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OBJECTIVES: To evaluate the total treatment cost and cost-effectiveness of treatments for elderly patients with acute myocardial infarction and patients for which treatment starts later, in the Greek NHS. **METHODS:** Data are coming from large RCTs evaluating the treatments considered. Outcomes include all major health events associated with an AMI. Trial data we extracted and used to populate a decision analytic model that computes events rates, survival and costs from AMI occurance till death. The model reports results for patients above 75 and for patients for which treatments starts at least 4 hours after symptom onset. The database of a large University Hospital was analyzed to estimate in-patient and outpatient costs associated with various events. Simulation was used to test the robustness of the results. **RESULTS:** For patients above 75 life time costs on alteplase, reteplase and tenecteplase were estimated, at €13.485, €13.400, and €13.824 respectively. Average survival was 1.8396, 1.8039, and 1.9325 years respectively. Tenecteplase has marginally higher cost and outcomes. Alteplase and tenecteplase dominate the second arm and